

U.S. Department of Transportation
Research and Special Programs Administration (RSPA)
Office of Contracts and Procurement, DMA-30
400 7th Street, SW, Room 7104
Washington, DC 20590

DOT Center for Climate Change and Environmental Forecasting - Transportation and Climate Change Research

DTRS56-05-BAA-0001, due January 31, 2005, Primary POC Ms. Carla Cuentas, Contract Specialist, Phone: 202-493-0556, Fax 202-366-7974, Email: carla.cuentas@rspa.dot.gov. Backup POC is Mr. Warren D. Osterberg, Contracting Officer; e-mail: warren.osterberg@rspa.dot.gov.

CONTRACT INFORMATION: Through this Broad Agency Announcement (BAA), the U.S. Department of Transportation (DOT) Research and Special Programs Administration (RSPA) is soliciting white papers on original scientific and policy research on the potential links between transportation and climate change and strategies that address the challenges posed by these links. Each white paper is not to exceed seven pages, including a title page, and must include the offeror's contact information (point of contact, telephone number, fax number and email address). Additional submission requirements are contained in the section entitled "Technical Requirements." Separate white papers must be submitted for each proposed project and multiple projects cannot be combined into a single white paper. DOT anticipates funding no more than \$400,000 for two to three projects but reserves the right to select any, all, or none of the proposals submitted.

SPECIAL NOTE: White papers (Phase 1, "Pre-proposals") should be submitted via email in PDF format on or before January 31, 2005. No hard copy submissions are required. A Government team of technical experts will review the white papers submitted in response to this announcement. Submitters will be advised of the outcome and anticipated follow-up from this review as it is completed.

BACKGROUND: Transportation is a major source of greenhouse gases (GHGs), producing approximately one quarter of GHG emissions in the United States. Because transportation is the nation's fastest growing sector, transportation's share of GHG emissions is increasing. Therefore, reductions in transportation emissions will be an important component of national approaches to avert climate change. Strategies to reduce GHG emissions will certainly affect transportation providers and consumers.

Equally important to the mobility of the nation, the effects of climate change may jeopardize portions of our transportation infrastructure. These potential impacts must be identified and analyzed so that the DOT can develop strategies to protect, maintain, and adapt our transportation networks, as necessary.

Much of DOT's research to deal with climate change is managed through the DOT Center for Climate Change and Environmental Forecasting (Center). Created in 1999, the Center functions as a "One-DOT," virtual organization led by a Steering Committee representing eight DOT Operating Administrations (Federal Aviation Administration, Federal Highway Administration, Federal Railroad Administration, Federal Transit Administration, Maritime Administration, National Highway Traffic Safety Administration, Federal Motor Carrier Safety Administration, and the Research and Special Programs Administration) and the Office of the Secretary of

Transportation. Through strategic research, policy analysis, partnerships, and outreach, the Center promotes comprehensive and multimodal approaches to reduce transportation-related greenhouse gases to mitigate the effects of transportation on global climate change and to identify adaptation strategies to deal with the challenges posed by climate change.

In 2003, the Center issued its first Broad Agency Announcement (DTRS56-04-BAA-0001) and selected six projects for awards in August 2004. Information regarding those projects and other activities of the Center can be found at <http://www.dot.gov/climate>.

OBJECTIVES AND SCOPE: The purposes of this BAA are to:

- Promote research on transportation and climate change;
- Enhance the nation's understanding of the links between transportation and climate change;
- Provide a sound scientific basis to inform national and international decisionmaking;
- Establish new linkages within the transportation community on climate change issues; and
- Foster successful research partnerships.

The research solicited under this BAA will support the U.S. DOT in understanding and addressing transportation-related GHG emissions, examine innovation in the transportation planning and decision-making processes pertinent to climate change matters, and/or improve knowledge of the impacts of climate change on the transportation sector. The funding is intended to support scientific research or policy analysis, but not technology development or demonstration. The Center is interested in funding projects related to one or more of the following topic areas:

1. Impact of Climate Variability and Change on Transportation

This research will examine the potential effects of climate variability and change on transportation infrastructure and services and will identify potential adaptation strategies for use by transportation decision makers, infrastructure builders and operators, and state and local planners.

2. Increasing Energy Efficiency and Reducing Greenhouse Gas Emissions

This research will examine opportunities for mitigating the GHG impact of the transportation sector. Projects may consider the potential for conservation through more efficient transportation practices, new or emerging technologies, the substitution of non-fossil fuels, market-based options (e.g., emissions charges and trading), or other methods. Research may pertain to any aspect of reducing the sector's GHG emissions, from increasing industry adoption and consumer acceptance of new technologies to overcoming challenges in technology development and deployment.

3. Data, Estimation and Modeling

This research will focus on developing and improving analytical tools and emissions or other data that could support transportation decision making at all levels of government and in the private sector. Data or estimation may involve research aimed at improving estimates of transportation greenhouse gas emissions or the emissions consequences of particular actions. Modeling work may involve fiscal instruments and other market mechanisms, vehicle and fuel characteristics, transportation system design and operation, or other research areas. Research in this area should provide a better basis for evaluating a broad range of multimodal transportation-

related options at different geographic scales. Research will help identify the contributions of various transportation modes to GHG emissions in the context of other GHG emissions, and help identify optimum mitigation options considering a multimodal approach.

4. Institutional Capacity Building

This research will analyze the prevailing institutional framework (i.e., the current and proposed legal and regulatory guidance, organization and management, administrative structures and processes of decision making) that supports or constrains the implementation of multimodal and intersectoral GHG emission reduction strategies at the local, metropolitan, State and Federal levels of government. The research should also address the current and potential problems and partnership opportunities arising from the interaction between U.S.-based multinational corporations operating in foreign countries subject to international GHG agreements. The research may address the U.S. Federal interagency cooperation activities involving domestic and international governmental partners as well as corporate stakeholders. The research will review the adequacy of resources available at all levels of government to accomplish the stated policy objectives, including the opportunities for career advancement, professional education and training at U.S. universities and foreign academic centers of excellence.

WHITE PAPERS: The Government will select projects through a two-phase process of proposal submission, review, and acceptance. In Phase 1, organizations are invited to submit white papers. A team of Government technical experts will review and evaluate the white papers. Based on this review, the submitters of those white papers selected for further consideration will be requested to submit full proposals (Phase 2) in accordance with the guidance provided later in this announcement.

TECHNICAL REQUIREMENTS: White papers and full proposals must meet the applicable requirements below to receive full consideration.

Phase 1 White Paper Requirements:

No more than 7 pages, including title page.

Contact Information, including:

- Full organization name;
- Mailing address;
- Point of contact;
- Telephone and fax numbers;
- Electronic mail address; and
- Organization's socioeconomic status.

Topic area(s) of the proposal.

General estimate of cost(s) and a description of potential cost share, if any.

Project description, including:

- Brief summary, including context in the existing literature w/ references;
- Research approach, which should include an estimated period of performance (two years, maximum); and tentative identification of deliverables and a milestone schedule, if available;

Description of past performance, including:

- Lead and contributing authors; and
- Past work on the subject of the proposal.

Phase 2 Full Proposal Requirements:

No more than 21 pages, including a title page.

Objective of the proposed work and a summary of the work to be done.

Participant organizations with contact information, identifying the lead organization.

Background of the proposed project, including:

- Information on the longer term goals of the organization;
- Summary of existing literature w/ references;
- Research contribution/importance – describe how the proposed research will advance the current knowledge; and
- Plans for future work in the proposed research area.

Statement of work, including:

- Numbered tasks and milestones with descriptions ;
- Expected completion date(s);
- Listing of Deliverables
- Costs, including leveraged funding and cost share (if any), for each task; and
- Detailed explanation of the proposed costs, e.g. direct labor, indirect costs, other direct costs, etc.

EVALUATION CRITERIA: The principal basis for selecting proposals will be funding availability and the value of the proposal to the Center's research agenda, as measured by the criteria below.

1. Technical Approach

The completeness, soundness, and adequacy of the proposed research plan, including clearly stated objectives, deliverables, outcomes, schedules and milestones, and quality control measures.

2. Innovativeness of Research

Demonstration of innovativeness and uniqueness of the proposed research and understanding of transportation and climate change issues within the context of the proposed research.

3. Relevance

Articulation of the potential benefits and value of the proposed research to the transportation sector and its relevance to the Center's research objectives.

4. Organization's Qualifications to Perform Research

Demonstration of the necessary staff to complete the proposed work, including qualifications of the Principal Investigator and other members of the research team; demonstration of successful completion of similar projects; ability to communicate research results; technical management capabilities; and availability of resources, facilities, and equipment.

All evaluation factors are of equal importance.

GENERAL INFORMATION: All products submitted under this announcement may be disseminated or used for government purposes subsequent to the completion of the work. The developer of the material also will have continued incidental use of the products for the purpose of additional research or marketing.

All deliverables need to meet the U.S. DOT requirements for published and electronic formats, including Section 508 compliance for all web-based products. Typical formats for electronic deliverables include MS Word, Excel, Access, PowerPoint, Adobe Acrobat PDF and HTML files. Deliverables should demonstrate professional-level competencies at layout, design, editing and proofreading for both print publication and for posting on an Internet web site. Prior experience working with Federal Government Printing Office (GPO) standards and Federal Internet web sites will be helpful but is not required.

ADDRESSES: This BAA can be downloaded via the Internet at: <http://www.rspa.dot.gov> under Procurement Opportunities. In all correspondence to the RSPA Office of Contracts and Procurement, please reference the BAA No. DTRS56-05-BAA-0001. Early submission of white papers responding to this BAA is strongly encouraged. Please submit white papers electronically in PDF format to carla.cuentas@rspa.dot.gov. No hard copy submissions are required. White papers must be received no later than January 31, 2005, at 4:00 PM, EST. NOTE: All inquiries concerning this announcement are to be directed, via e-mail, to the RSPA Office of Contracts and Procurement, ATTN: Ms. Carla Cuentas, Contract Specialist, e-mail: carla.cuentas@rspa.dot.gov or Mr. Warren D. Osterberg, Contracting Officer, e-mail: warren.osterberg@rspa.dot.gov. For further technical information specific to the DOT Center for Climate Change and Environmental Forecasting research program, please contact: Ms. Jennifer Antonielli (Jennifer.Antonielli@rspa.dot.gov).

BROAD AGENCY ANNOUNCEMENT: This FedBizOps notice, in conjunction with further announcement details available from the RSPA procurement site Internet address identified above, constitutes the BAA as contemplated by FAR 6.102(d)(2). A formal Request for Proposals (RFP) for other type of solicitation regarding this announcement will not be issued. The funding will be allocated by DOT's Center for Climate Change and Environmental Forecasting (the Center) through a two-phased competitive process described in this notice. U.S. DOT anticipates funding no more than \$400,000 for two to three projects for this fiscal year but reserves the right to select any, all, or none of the proposals submitted. A technical evaluation team will review all white papers received for responsiveness to the evaluation areas stated in this BAA. Offerors providing white papers deemed worthy of further consideration and meeting the criteria of this BAA will be notified with possible suggestions for change in scope and detailed guidelines for submitting full proposals. No discussions will be held between an offeror and the Government's technical staff after submission of a white paper without the Contracting Officer's prior approval. It is DOT/RSPA's desire to encourage the widest participation, particularly the involvement with universities and other academic institutions, as well as with individuals, corporations, non-profit organizations, small and small disadvantaged businesses, and State or local governments or other entities.